Joint Force Opportunities: Policy Aims and Adaptations

A Monograph

by

Major Jeffrey M. Mack United States Air Force



School of Advanced Military Studies United States Army Command and General Staff College Fort Leavenworth, Kansas

2016

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Service Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

| PLEASE DO NO | OT RETURN YO | JR FORM TO T | HE ABOVE ORGANIZATI | ION. | , | | |
|--|--|--------------------|-----------------------------|-----------------|---|---|--|
| 1. REPORT DATE (DD-MM-YYYY) 2. REPORT TYPE | | | | | 3. DATES COVERED (From - To) | | |
| 2022/20 | -03-2016 | | SAMS Monog | graph | | JUN 2015 - MAY 2016 | |
| 4. TITLE AND S | SUBTITLE | | | | 5a. CON | ITRACT NUMBER | |
| Ioint Opportuni | ities: Policy Aim | s and Adaptation | าร | | | | |
| tonic opportuni | mos. r chey rinn | s una ricapitation | | | 5b. GRA | ANT NUMBER | |
| | | | | | | | |
| | | | | | 5c. PRC | GRAM ELEMENT NUMBER | |
| | | | | | | | |
| 6. AUTHOR(S) | | | | 7 | 5d. PRC | DJECT NUMBER | |
| | | | | | | | |
| Major Jeffrey M | 1. Mack | | | | 50 TAS | KNUMBER | |
| | | | | | oc. TAC | KINOMBER | |
| | | | | | | | |
| | | | | | 5f. WORK UNIT NUMBER | | |
| | | | | | | | |
| | | | ND ADDRESS(ES) | | 54 | 8. PERFORMING ORGANIZATION REPORT NUMBER | |
| 030352804045200551 | | ral Staff College | | | | REPORT NOMBER | |
| ATTN: ATZL-S | swD-GD rth, KS 66027-23 | 301 | | | | | |
| TOR Leavenwor | .ш, кв 00027-23 | 701 | | | | | |
| 9. SPONSORIN | IG/MONITORING | 3 AGENCY NAM | E(S) AND ADDRESS(ES |) | | 10. SPONSOR/MONITOR'S ACRONYM(S) | |
| | | | | | | at 50 | |
| School of Adva | nced Military St | udies | | | | | |
| | | | | | | 11. SPONSOR/MONITOR'S REPORT NUMBER(S) | |
| | | | | | | NOMBER(3) | |
| 12 DISTRIBUT | ION/AVAILABIL | ITY STATEMENT | | | | | |
| 12. DIGTRIBOTI | ONAVAILABILI | TISTATEMENT | 1 | | | | |
| Approved for p | ublic release. Di | stribution is unli | mited. | | | | |
| Make the first state of the second of the se | | | | | | | |
| 13. SUPPLEME | NTARY NOTES | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 14. ABSTRACT | | rattempte to mad | at policy aimed at the curr | rival and proce | erity of th | e nation. The dialog between the policy maker | |
| 10 May 15 M | 75 1997 (2) | | 10 10 | | 1450 | onstantly shifting policy. This monograph | |
| | | | | | | tack in 2003 through the end of the "Surge" in | |
| 5.5 · · · · · · · · · · · · · · · · · · | 20.00.00.00.00.00.00.00.00.00.00.00.00.0 | | | | | ategy that emerged. Understanding the complexity | |
| | | | | | | ns-national institutions can assist adaptation. The | |
| joint force adap | oted in Iraq from | 2007 to 2008 to | the operational environm | ent and US pol | icy aims. | | |
| | | | | | | | |
| | | | | | | | |
| 15. SUBJECT T | EDMC | | | | | | |
| | | onshin compley | adaptive systems, joint fo | orce Operation | Iragi Free | edom | |
| Adaptation, civ. | II-IIIIIIdary Telauk | лыпр, соприсх | adaptive systems, joint te | лес, Орегацоп | naqi i i co | Cuom | |
| | | | | | | | |
| 16. SECURITY CLASSIFICATION OF: 17. LIMITATION OF 18. NUMBER | | | | | | IE OF RESPONSIBLE PERSON | |
| a. REPORT | b. ABSTRACT | c. THIS PAGE | ABSTRACT | OF PAGES | - 2 | frey M. Mack | |
| (U) | (U) | (U) | (U) | 44 | 19b. TEL | EPHONE NUMBER (Include area code) | |

Monograph Approval Page

| Name of Candidate: | Major Jeffrey M. Mack | | | | | |
|--------------------------------------|-----------------------|---|--|--|--|--|
| Monograph Title: | Joint Force Opp | ortunities: Policy Aims and Adaptation | | | | |
| Approved by: | | | | | | |
| G. Stephen Lauer, PhD | | _, Monograph Director | | | | |
| Christopher M. McGow | an, COL | _, Seminar Leader | | | | |
| Henry A. Arnold III, CC | DL | , Director, School of Advanced Military Studies | | | | |
| Accepted this 10 th day o | f May 2016 by: | | | | | |
| Robert F. Baumann, Phl | D | , Director, Graduate Degree Programs | | | | |
| | | herein are those of the student author and do not | | | | |

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other government agency. (References to this study should include the foregoing statement.)

Fair use determination or copyright permission has been obtained for the inclusion of pictures, maps, graphics, and any other works incorporated into this manuscript. A work of the United States Government is not subject to copyright, however further publication or sale of copyrighted images is not permissible.

Abstract

Joint Force Opportunities: Policy Aims and Adaptations, by Major Jeffrey M.Mack, US Air Force, 44 pages.

The US joint force continuously attempts to meet policy aimed at the survival and prosperity of the nation. The dialog between the policy maker and military adviser requires a broader and deeper understanding to align strategy and means to constantly shifting policy. This monograph employs an interdisciplinary qualitative chronological case study of the Iraq war from the initial attack in 2003 through the end of the "Surge" in 2008. It examines the joint force's attempt to adapt to policy with the means available, and the strategy that emerged. Understanding the complexity of local to global interaction and relationships from the singular individual to international and trans-national institutions can assist adaptation. The joint force adapted in Iraq from 2007 to 2008 to the operational environment and US policy aims.

Contents

| Figures | vi |
|--|----|
| Section I. Introduction | 1 |
| Section II. Historical Case Analysis: Operation Iraqi Freedom 2003-2006 Policy Aims | 11 |
| United States Agents and Structure | 12 |
| Iraq Agents and Structure | 21 |
| Iraq 2003-2006 Analysis | 24 |
| Section III. Historical Case Analysis: Operation Iraqi Freedom 2007-2008 "The Surge" | 27 |
| Iraq Agents and Restructure | 27 |
| United States Agents and Restructure | 29 |
| Iraq 2007-2008 Analysis | 33 |
| Section IV. Conclusion | 36 |
| Bibliography | 41 |

Acknowledgments

To Dr. Frederick Sontag who saved so many young men. For my Brothers and Sisters in arms that live the fight daily and those that blessedly know peace. To my mother and father for feeding a passion for learning with a work ethic; and your patient love. To D, B, and C: I love you eternally.

Figures

| 1 | Anaconda Strategy versus Al Qaeda in Iraq. | 31 |
|---|--|----|
| 2 | Overall Weekly Security Incident Trends in Iraq. | 33 |

Introduction

The probable character and general shape of any war should mainly be assessed in the light of political factors and conditions— and that war should often (indeed today one might say normally) be conceived as an organic whole whose parts cannot be separated, so that each individual act contributes to the whole and itself originates in the central concept, then it will be perfectly clear and certain that the supreme standpoint for the conduct of war, the point of view that determines its main lines of action, can only be that of policy.

-Carl Von Clauswitz, On War

The United States faces significant security challenges in the twenty-first century. The assumption is that risk may aggregate across time to the point of eventually presenting an unassailable existential threat to the United States. Consequently, the imperative to lead the international community exists while adapting to new national security challenges and opportunities. Despite tactical dominance in the last fifteen years of war against violent extremist organizations and oppressive regimes, public perception of strategic failure lingers. Attacks on the US homeland and allies, global economic issues, weapons proliferation, severe global infectious diseases and potential pandemic, climate change, energy security, and failing states or instability in the international order are samples of the pervasive considerations in the global security environment, the complex system, within which the US joint force interacts.¹

To successfully address this range of dynamic strategic threats and opportunities, the US joint force needs to continuously adapt to meet policy aimed at the survival and prosperity of the state. Understanding the complexity of local to global interaction from the singular individual to international and trans-national institutions can assist that adaptation. Future adaptation by the joint force depends on better conceptualizing complexity while still aligning ethically, morally,

¹ Joint Chiefs Of Staff, *Joint Publication 3-0*. Department of Defense (Washington DC, 2011), G-11. "Joint Force": A general term applied to a force composed of significant elements, assigned or attached, of two or more Military Departments operating under a single joint force commander.

and statutorily with the US National Security Strategy's four focus areas of security, economic prosperity, respect for human values, and international order.²

Studying complexity and complex adaptive systems holds promise not as a panacea, but whispers at a deeper understanding of interdependence and interaction between people, institutions, and cultures with deeply held beliefs and desires, with histories, and high intelligence. People in their respective social and political positions all attempt different measures of success by selection of strategies and adaptation. A better understanding and adaptation of the negotiation between the policy maker and the military is required by the joint force operational artist to align strategy and means to constantly shifting policy.

As soon as a decision is made at the policy level and the joint force interacts with the operational environment prescribed by the policy, the environment changes and the policy necessarily evolves to account for the change. This interaction is constant. Whether by interaction with other populations in the operational environment, or shifts in domestic or international policy, all of which are interdependent, the joint tactical forces tend to lag in their adaptation to emerging policy and strategy demands, not in their direct tactical adaptation and survival to the operational environment. This indicates where the potential for better understanding and improvement as a military joint force resides.

Improving efficiency has been assumed as one of the primary keys to success since humankind has gone to war. When physical chaos and mental confusion often surface at the most inopportune time, military forces impose organization and discipline to order the disorder of battle and stretch the resources of blood and treasure as far as possible. History is replete with examples of innovation in the organization and training of forces that gained the combatant more

² President of the United States, *National Security Strategy*. National Security Council (Washington DC, 2015), 2.

probability of success during battle by striving to eliminate what Clausewitz would call friction: "Everything in war is simple, but the simplest thing is difficult." The Western military tradition continually tried to organize war and eliminate confusion and friction to overcome this difficulty.

The foundations of the Enlightenment in the seventeenth and eighteenth centuries matured in the social and political context of nineteenth century Europe to produce Jomini's principles of war, organization and tactics of the flying wings of Napoleon's Corps, the precision of Prussian mobilization and drill. Artillery emerged and firepower grew. Moltke famously tried to eliminate the political variable once the decision was made to employ the Prussian military for war to further streamline military decision-making.⁴ All believed the combination of their brand of efficiency through leadership, discipline, movement and maneuver, and firepower would win to achieve their policy aims.

But no matter how efficient and precise their conception of war was, other trends and forces hinted efficiency and the minimization of friction were not the only ways to accomplish whatever measure of success was set as a goal. The constancy of Clausewitz's friction hinted there were other forces affecting the Newtonian mechanics of the efficient universal machine. Adam Smith described it as the "Invisible Hand" in economic theory. Darwin described it as natural selection. On the battlefield, Clausewitz saw "how many factors are involved and have to be weighed against each other, the vast almost infinite distance there can be between a cause and

³ Carl Von Clausewitz, *On War*, ed. Michael Howard and Peter Paret (United States: Princeton University Press, 1984), 119.

⁴ Geoffrey Wawro, *The Franco-Prussian War: The German Conquest of France in 1870-1871* (United Kingdom: Cambridge University Press, 2005), 47.

⁵ Jamshid Gharajedaghi, *Systems Thinking: Managing Chaos and Complexity - A Platform for Designing Business Architecture*, 2nd ed. (Boston, MA: Butterworth-Heinemann, 2005), 119.

⁶ Charles Darwin and Julian Huxley, *The Origin of the Species by Means of Natural Selection of the Preservation of Favoured Races in the Struggle for Life* (New York: Signet Classic, 2003), chap. 4, accessed September 13, 2015, iBooks.

effect, and the countless ways in which these elements can be combined." In their respective contexts, Smith, Darwin, and Clausewitz were all sensing and describing complex adaptive systems. Robert Jervis demonstrated complexity and its utility in comprehending political behavior using several exacting examples from the fields of economics and evolutionary biology.8

When the twentieth century arrived, the organization and training of military forces was still considered a science to be understood in the context of technological advance, efficiency training, and harnessing industry. In the late twentieth century, the formula manifested as the US Army's AirLand Battle concept against potentially overwhelming Soviet mass. Efficiency, industrial production, discipline, technology, combined arms and maneuver, and precise effects of firepower could win. 10

However, echoing and interpreting Mao, that may have been the right force at the right place at the right time in a uniquely American context.¹¹ Instead of the Soviets, the US joint force went to war with Iraq for the second time in twelve years in Operation Iraqi Freedom and achieved initial military dominance, mirroring Operation Desert Storm in expectation. But Operation Iraqi Freedom did not produce the expected end-state of a free and democratic Iraq as a

⁷ Clausewitz, *On War*, 577.

⁸ Jervis, Robert, *System Effects: Complexity in Political and Social Life*, 3rd ed. (United States: Princeton University Press, 1997), chap. 1, 4, & 6.

⁹ US Army Training and Doctrine Command, 'Operational Concepts for the AirLand Battle and Corps Operations -1986', US Army Operational Concepts TRADOC pam, 525-5 (Fort Monroe, VA: US Army Training and Doctrine Command, March 15, 1981), 2; G.S. Isserson, 'The Evolution of Operational Art', trans. Bruce W. Menning, *SAMS Theoretical Special Edition* (2005), ii, 47.

¹⁰ Ibid.

¹¹ Mao Tse-tung, 'Selected Works of Mao Tse-Tung', *Marxist.org*, accessed August 15, 2015, https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1_12.htm.

stabilizing influence and strategic partner in the Middle East. ¹² Today, the emergence of Islamic State of Iraq and al-Sham is observable evidence. ¹³

By considering Operation Iraqi Freedom from the position of the joint force as a complex adaptive system, insight garnered helps the joint force of the future ask difficult questions about policy and war at the critical moments when deliberate questions increase measures of success for national security. The political aim assists as a starting point in evaluating the potential influence of the military campaign in a complex environment. Saddam Hussein wanted to maintain regime control. The United States wanted regime change in Iraq for perceived reasons beneficial to national security.

This monograph employs an interdisciplinary qualitative chronological study of the Iraq war from the initial attack in 2003 through the end of the "Surge" in 2008. It examines the joint force's attempt to adapt to policy with the means allowed, and the strategy that emerged. Why adaptation did not or did take place is further examined in the conclusion of the monograph.

Discussion of adaptive characteristics and emergent properties in the conclusion carries opportunity for identification of risk and success of the joint force in the future. ¹⁴

¹² Ali A. Allawi, *The Occupation of Iraq: Winning the War, Losing the Peace*, 1st ed. (New Haven, CT: Yale University Press, Cumberland, Rhode Island, U.S.A., 2007), 11.

¹³ Hamza Hendawi Hendawi, "Isis Top Brass Is Iraqi Army's Former Best And Brightest," *Haaretz*, August 8, 2015, accessed December 17, 2015, http://www.haaretz.com/israel-news/1.670177; Liz Sly, "The Hidden Hand Behind the Islamic State Militants? Saddam Hussein's," *Washington Post*, April 4, 2015, accessed December 17, 2015, https://www.washingtonpost.com/world/middle_east/the-hidden-hand-behind-the-islamic-state-militants-saddam-husseins/2015/04/04/aa97676c-cc32-11e4-8730-4f473416e759_story.html;Tom Wyke, "Over 100 Former Saddam Hussein-era Officers Make Up ISIS Leadership," *Daily Mail*, August 8, 2015, accessed December 17, 2015, http://www.dailymail.co.uk/news/article-3190314/The-secret-ISIS-s-success-100-former-Saddam-Hussein-era-officers-run-jihadi-group-s-military-intelligence-operations-Iraq-Syria.html.

¹⁴ Robert Axelrod and Michael D. Cohen, *Harnessing Complexity: Organizational Implications of a Scientific Frontier* (New York: Basic Books, 2001), 15. Emergent properties are properties of a system that separate parts do not have. An example is consciousness. By itself, a neuron does not have the property of consciousness, but a system of neurons, the brain, does.

This work uses overarching concepts from complexity and systems theory of a complex adaptive system, specifically focusing on two concepts derived from Robert Axelrod's, *Harnessing Complexity*, to shape the analysis. These two concepts are agents and structure. For the joint force to be a complex adaptive system, the agents in the system have to actively seek adaptation and deliberately change the structure of the system in order to increase some measure of success. ¹⁵ The interaction of the variables will be evaluated through the criterion of adaptation.

The term agent represents an individual capable of interacting with their environment. For example, the US joint force was a structure of agents while another structure of agents was the insurgency in Iraq. The joint force was a finite construct and de-limited population. The "insurgency" was ill-defined and virtually unlimited. The complex adaptive system lens for analysis assists in describing the interaction of multiple organizations, agents, and structures in the operational environment of Iraq. Another way to think of structure is relationship. While structure carries a rigid connotation, relationship is fluid and dynamic, redefinable in a moment of logic and emotion, distance or proximity, peace or violence. Agents affect a complex adaptive system by restructuring the relationships of the agents in the system.

Identified organizations have specific agents within them that make decisions and take actions in the selection of strategy to "interact and influence the probability of later events." ¹⁶ Examples in this monograph of agents are General (US Army, Retired) David H. Petraeus, General (US Army, Retired) Stanley A. McChrystal, or Abu Musab al-Zarqawi, a leader in Al Qaeda. Complexity theory holds their interdependence in addition to a combination of other interactions, some knowable, some unknowable, produces sometimes predictable, sometimes unanticipated outcomes later in time. Interaction, variation, and selection affect relationships

¹⁵ Axelrod, *Harnessing Complexity*, 9.

¹⁶ Ibid, 7.

between agents. The important idea is that leaders make decisions to influence the probability of future events, but can't control or linearly cause events to evolve in a specific way.

Agents purposefully select strategies to reach some measure of success. When an organization of agents pursues its goals in a strategy and the processes within a strategy change through interaction patterns, it is known as variation. Whether due to internal variations or more external pressures, an organization can respond with a new strategy. Agents consider and make choices based on what is happening and what they think will happen. When an organization does choose a new strategy, this monograph presents this as selection. Selection could lead to an emergent property of the system and innovate success. Furthermore, if a selection is made and the changed strategy is successful, it is adaptation.

For the joint force to be a complex adaptive system, the organization had to actively seek adaptation and deliberately change the structure of the system in order to increase some measure of success. Examining interaction between agents and structure of the joint force in relationship to Iraqi society agents and structure in the case of Operation Iraqi Freedom prepares the joint force for adaptation in the future. There is no doctrinal formula for adaptation.

Robert Axelrod and Michael D. Cohen's, *Harnessing Complexity: Organizational Implications of a Scientific Frontier* provided the primary material for framing the discussion.

Axelrod's perspective implied how a military officer could alternatively make decisions and influence future events without the illusion of control in a complex system. Jeffrey Kluger's *Simplexity: Why Simple Things Become Complex (and How Complex Things Can Be Made Simple)* clearly articulated how complexity occurs all the time in the natural world. Bousquet's article, 'Beyond Models and Metaphors: Complexity Theory, Systems Thinking and International

¹⁷ Axelrod, *Harnessing Complexity*, 6.

¹⁸ Ibid.

Relations', ¹⁹ Harrison's book, *Complexity in World Politics: Concepts and Methods of a New Paradigm*, Jervis' *System Effects: Complexity in Political and Social Life*, and Strachan's book, *The Direction of War: Contemporary Strategy in Historical Perspective*, discussed politics, international relations, and complexity; and contributed to a broader understanding of the context and etiology of complexity theory in international relations. Freedman's tome, *Strategy*, provided some especially useful insight in addressing the idea of deliberate and emergent strategy and the interaction between the two; especially when considered in the context of Iraq. ²⁰

Moving from theoretical frame to the historical evidence, the primary and secondary historical sources grounded the more ethereal ideas of complexity. Whether providing specific evidence or improving the tone and tenor of overall contextual understanding, each contributed uniquely to analysis of the environment for the time period encapsulated in this monograph.

For the first historical case from 2003 to 2006, Gregory Fontenot's *On Point: The United States Army in Operation Iraqi Freedom* provided a thorough account of the US Army's perspective on the initial invasion into Iraq in 2003.²¹ It had transparency in its detailed operational account unencumbered by future perception when published in 2004. Conversely, it suffered in its ability to be objective by close temporal proximity to recounting what happened.

¹⁹ Antoine Bousquet and Simon Curtis, 'Beyond Models and Metaphors: Complexity Theory, Systems Thinking and International Relations', *Cambridge Review of International Affairs* 24, no. 1 (March 2011): 43–62; Neil E. Harrison, ed., *Complexity in World Politics: Concepts and Methods of a New Paradigm (Suny Series in Global Politics)* (Albany: State University of New York Press, 2006); Robert Jervis, *System Effects: Complexity in Political and Social Life*, 3rd ed. (United States: Princeton University Press, 1997); Hew Strachan, *The Direction of War: Contemporary Strategy in Historical Perspective* (Cambridge: Cambridge University Press, 2013).

²⁰ Sir Lawrence Freedman, *Strategy: A History* (Oxford: Oxford University Press, USA, 2013).

²¹ Gregory Fontenot, E J Degen, and David Tohn, *On Point: The United States Army in Operation Iraqi Freedom (Through May 2003)* (United States: Combat Studies Institute Press, 2004).

Army officers authored it at the time when Operation Iraqi Freedom was considered a great operational success. *Cobra II*, by Michael Gordon and Lieutenant General (Retired, USMC) also provided a thorough analysis of the initial invasion, while also capturing the political facet of the US Administration's disdain for nation building even though it evolved into their policy for Iraq. It highlighted the confluence and problem of political aims and emergent strategy in Iraq. ²² The *Iraq War* by Anthony Cordesman of the Center for Strategic and International Studies think-tank also has the benefit and weakness of being published in 2003. ²³ It offers a detailed military analysis and account. Ali A. Allawi's, *The Occupation of Iraq*, *Winning the War*, *Losing the Peace*, provides insight on the growth of the Iraqi insurgency and civil war catalyzed by US military operations and political decisions. ²⁴ It is a uniquely Iraqi perspective on the composition of the insurgency and how it was shaped shaped by the complex US, Sunni, Shi'a, transnational Al Qaeda, and Kurd relationships. Emile Simpson's *War from the Ground Up* provided insight into the destabilising effect of violence in fragmented political environments for prolonged periods of time. ²⁵

Kimberly Kagan's, *The Surge: A Military History* provided insight on the US administration and military's realization of the complex civil war and insurgency in Iraq.²⁶ Colonel (US Army, Retired) Peter R. Mansoor's, *Surge: My Journey with General David Petraeus and the Remaking*

²² Michael R Gordon and Bernard E Trainor, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq* (New York, NY: Pantheon Books, 2006).

²³ Anthony H. Cordesman, *The Iraq War: Strategy, Tactics, and Military Lessons*, 1st ed. (United States: Praeger published in cooperation with Center for Strategic and International Studies, 2003).

²⁴ Ali A. Allawi, *The Occupation of Iraq: Winning the War, Losing the Peace*, 1st ed. (New Haven, CT: Yale University Press, Cumberland, Rhode Island, U.S.A., 2007).

²⁵ Emile Simpson, *War from the Ground Up: Twenty-First Century Combat as Politics* (Australia: Scribe Publications, 2013), 84-87.

 $^{^{26}}$ Kimberly Kagan, *The Surge: A Military History* (United States: Encounter Books, 2010).

of the Iraq War, captured the corresponding response.²⁷ Mansoor's book was especially helpful as it not only provided his first-hand account, but included a Foreword with a primary source perspective of General (US Army, Retired) David H. Petraeus. General (USA, Retired) Stanley A. McChrystal, David Silverman, and Tantum Collins', Team Of Teams: New Rules Of Engagement For A Complex World injected further understanding of the Iraqi insurgent perspective and adaptability.²⁸ It also provided the corresponding Joint Special Operations Command analysis of the problem and responsive adaptation. All captured explicitly or tacitly how the interactions and interdependence of a complex system produced unanticipated outcomes, even in adaptation.

Operation Iraqi Freedom is analyzed in the next two sections through the variables of agents and structures evaluated through the criteria of adaptation in complexity theory. Sections two and three respectively cover the time periods in Iraq from 2003 to 2006 and 2007 to 2008. Section II covers the historical case from 2003 through 2006 and focuses on the joint force transitioning from a combined arms perspective to a counter insurgency mission integrated with changing US policy aims. The Section III historical case analysis from 2007 to 2008 captures policy change and examines the adaptive "Surge" of US military forces to counter insurgency and meet US policy aims. This monograph will then conclude in Section IV with a discussion of complexity, adaptation, self-organization, emergence, and suggest significance for the joint force in the future.

²⁷ Peter R. Mansoor, *Surge: My Journey with General David Petraeus and the Remaking of the Iraq War* (United States: Yale University Press, 2014).

²⁸ Stanley A. McChrystal, David Silverman, and Tantum Collins, *Team Of Teams: New Rules Of Engagement For A Complex World* (United Kingdom: Penguin Books, 2015), pt. 8, – chap. 2, accessed August 29, 2015, iBooks.

Section II. Historical Case Analysis: Operation Iraqi Freedom 2003-2006 Policy Aims

The security policy for the United States from September 11, 2001 onward was to disrupt, degrade, and destroy extremist organizations targeting the United States, its citizens, and its interests in the homeland or abroad.²⁹ By early 2002 the Taliban regime in Afghanistan had been toppled and the National Security Council was looking at other operations, activities, and actions to pursue extreme terrorist elements posing a perceived threat to the United States. The US National Security Strategy of 2002 was more concerned with instability produced by failing states than conquering states.³⁰

But even on the evening of September 11th, 2001, as Secretary of State Colin Powell had flown back immediately from leave in South America and calmly started advising President George W. Bush to build a coalition in line with National Security Advisor Condoleezza Rice's perspective, Secretary of Defense Donald Rumsfeld was already inquiring about a presumed linkage between Al Qaeda and the nation state of Saddam Hussein's Iraq. There was a presupposition in Rumsfeld's mind that Iraq was culpable.³¹ Consequently, the call for war with Iraq solidified in October 2002 as Congress authorized war with Iraq and three weeks later the US mid-term elections resulted in the Republican Party retaining the House and gaining a majority in the Senate.³² The Bush Administration settled on regime change in Iraq as a central pillar of US policy in the broader Middle East. The President surmised he had the popular support to affect a war with Iraq in pursuit of policy.³³

²⁹ The National Security Strategy of the United States of America, 2002, accessed February 21, 2016, http://www.state.gov/documents/organization/63562.pdf, 6.

³⁰ Ibid, executive summary.

³¹ Bob Woodward, *State of Denial: Bush at War, Part III*, 1st ed. (New York: Simon & Schuster, 2006), 77.

³² Gordon, Cobra II. 130.

³³ Woodward, State of Denial, 100.

These efforts culminated on 17 March 2003, when President Bush issued an ultimatum to Iraq: "Saddam Hussein and his sons must leave Iraq within 48 hours. Their refusal to do so will result in military conflict." Regime change was accomplished in Iraq by the invasion of coalition forces without a resolution from the United Nations. The Bush White House deemed the sanctioned coalition from the United Nations, as Secretary Powell sought, as unnecessary. The tenet of preemptive action to ensure national security after September 11, 2001 became a central piece of US national security policy, and was illustrative of the US government interacting with their environment to achieve their circumscribed goal of national security despite institutional norms of the international community.

United States Agents and Structure

The Bush Administration decided regime change in Iraq was the best policy to pursue in the interest of US national security. 35 Agents with constitutionally statutory and informal structures of relationships that constantly shifted towards cooperative and divergent political aims composed the Administration. Those agents in the Administration interacted with their environment in pursuit of a strategy they perceived would further the likelihood of achieving security gains for the US. "The aim was not just to topple a dictator. While many observers viewed intervention in Iraq with anxiety, the White House approached it as a strategic opportunity... (to) implant democracy in a nation that had never known it and begin to redraw the political map of the region." But that very interaction of regime change and pursuit of

³⁴ Fontenot, *On Point*, 86.

³⁵ Ibid.

³⁶ Gordon, Cobra II, 73.

democracy realigned the structures of the relationships with US, Iraq, the international community, regional and transnational actors, and with the agents composing Iraqi society.

The attack on Iraq by the US and its coalition partners affected the US policy aim of regime change in Iraq in the initial stages from a doctrinal joint, combined arms, and maneuver perspective. From an international relations theory realist perspective, one state devastated another and achieved a relative power gain towards their national security interests. In the US joint force conception of decisive victory and theory of warfare, the US sought final victory in the overthrow of the Hussein regime. The political objective of regime change determined the method of warfare. In this case, the method was joint combined arms, mechanized, rapid and decisive maneuver. The political aim shaped the design of the campaigm. Saddam Hussein's regime collapse characterized the initial US perception of Operation Iraqi Freedom's execution in late March 2003 as virtually flawless and ended twelve years of diplomatic gamesmanship.³⁷

By regime change, the US was restructuring agents and their relationships intra Iraq and internationally. The initial invasion was predicated on the US casting Iraq as a safe haven for transnational terrorist organizations, such as agents and organized elements of Al-Qaeda, and as an industrialized state owner of weapons of mass destruction (WMD).³⁸ This logic resonated within the perceptions and preferences of his political coalition.³⁹ But it also underscores the lack of understanding of the multiple pathways resulting from regime change in Iraq. In 2002 the US National Security Strategy explicitly acknowledged the US concern with mitigating the dangers of failing states.⁴⁰ The assumption was failing states manifest instability and in the context of the

³⁷ Fontenot, *On Point*, 86.

³⁸ Woodward, *State of Denial*, 99.

³⁹ Alan C. Lamborn, "Theory and politics in world politics," *International Studies Quarterly* 41, no. 2 (June 1997), 191.

⁴⁰ The National Security Strategy of the United States of America, 6.

9/11 attack, instability cultivated opportunity for violent extremist organizations to recruit, train, network, hide, and plan. Based on this assumption in the National Security Strategy 2002, the calculus for the Bush Administration's policy aim in Iraq had structural inconsistency. One strain of thought was failed states generate terrorists. Conversely, state sponsored terrorism from a brutal but stable regime in Iraq was untenable.

The means of the coalition were deliberately applied at the tactical, operational and strategic level with the policy aim of overthrowing the existing dictatorial government of Saddam Hussein in order to prevent state sponsored terrorism. After President Bush's ultimatum to Saddam Hussein on 17 March 2003, US V Corps executed a quick, shocking, decisive military campaign using Third Infantry Division, Fourth Infantry Division, the 101st Airborne Division, Eighty Second Airborne Division, Second Armored Cavalry Regiment, Third Armored Cavalry Regiment in conjunction with the Marine Expeditionary Force and United Kingdom First Armored Division that lasted from 19 March to 1 May 2003. 41 They integrated per doctrine as a Combined Forces Land Component Command, and synchronized their actions with the Combined Forces Special Operations Commander and Combined Forces Air Component Commander. 42 In the initial push, the Combined Forces Land Component Commander was supported by an average of 1500 to 2000 air sorties a day from the Navy, Marines, and Air Force and the assurance of air supremacy to enable movement and maneuver. 43 From the US military's strategic perspective, the desired end state of combat operations was to displace Saddam Hussein and the Ba'ath party from power and control the capital, Baghdad. While these objectives were attained militarily, an unaccounted for result of military intervention was a lack of any new Iraq

⁴¹ Fontenot, On Point, 427.

⁴² Department of Defense Dictionary of Military and Associated Terms, 34.

⁴³ Fontenot, *On Point*, 86.

institution to control the country as a state. Combat still went on as expected, but by 19 April the policy focus had shifted to transition.⁴⁴ The US policy makers expected the complex demographic of Iraq, just vanquished in war, to adapt and emerge as an institution to run the country.⁴⁵

The basic assumption was that military superiority prevails in war. The assumption of the Bush administration: if Iraq was freed from the oppressive Ba'ath regime by the US military, the people of Iraq would greet the invasion with joyous scenes of welcome for a liberating army and rise to the opportunity of freedom to prosper; it was not so.⁴⁶ This assumption conceptualized the Iraq people and culture as building a society based on moderation, pluralism, and democracy as evidenced in an August 2002 Bush Administration strategy document.⁴⁷ It assumed Iraq wanted a representative democracy, but "there were no public cheers for democracy, no indications that this was a people hungering for the freedoms and liberties of the west."⁴⁸

But the reality was the Iraqi people and culture were not a homogenous ethnic and cultural entity desiring unity as a new state. Moreover, Iraq had never been governed by western style democracy. Historically, there had been a powerful elite regime in charge. The oppressive Ba'ath party had been in power since 1968. 49 Too many factions within and proximal to Iraq had interests that were not aligned with the US assumptions or the desired end state of a free, democratic, prosperous, and peaceful Iraq as conceptualized by the Bush Administration.

⁴⁴ Fontenot, *On Point*, 330.

⁴⁵ Gordon, Cobra II, 142.

⁴⁶ Allawi, *The Occupation of Iraq*, 90.

⁴⁷ Gordon, Cobra II, 72.

⁴⁸ Allawi, *The Occupation of Iraq*, 1.

⁴⁹ Ibid, 29.

Misagh Parsa has hypothesized that there are three key elements that an enable a successful regime change or revolution within in a state. These elements are an elite polity or authoritarian ruling class, a hyperactive economic situation for which the elite polity is blamed, and a broad coalition to displace the elite polity. Iraq had both an increasing difficult economic situation form UN sanctions and an exclusive polity in Sadaam and the Baath Party, but there was never a broad coalition from within Iraq that coalesced to displace or threaten the regime. After the Gulf War in 1991, there was an uprising that met these criteria, but a decisive and brutal suppression by Sadaam and his surviving instruments of hard military power shattered the broad coalition within the Iraq nation after the war. Without material support and action from the outside, it floundered. Again in 2003, the broad coalition of mutual interests and consensus within the Iraqi demographic was never in place or coalesced when the elite polity of the Ba'ath party was displaced. The violence of war disrupted the structure of relationships and agents that stabilized Iraq prior to the invasion. Violence catalyzed instability as interaction patterns and interdependencies reformed among formal and informal organizations in the months following initial combat.

The contemporary trope is no one in the United States Government planned for post combat Iraq, but Secretary Rumsfeld had actually identified the integral requirement for a political solution for postwar Iraq in a meeting with pre-drafted talking points delivered to General "Tommy" Franks, commander, US Central Command. ⁵¹ However, identifying the requirement is different than tasking, validating, creating, re-assessing, following up on a cogent plan, and then executing it. General Franks (US Army, Retired) was familiar and aware of the

⁵⁰ Misagh Parsa, *States, Ideologies, and Social Revolutions: A Comparative Analysis of Iran, Nicaragua, and the Philippines* (Cambridge, England: Cambridge University Press, 2000), 26.

⁵¹ Gordon, Cobra II, 22.

Central Command base plan for the unanticipated or intentional quick collapse of Iraq, but there was a "gaping hole in the occupation annex of the plan...there was no plan for political administration, restoration of basic services, training of police, or reconstruction of Iraq." General Franks' (US Army, Retired) perception was Central Command was to provide general security, but nothing detailed beyond that based on the Office of the Secretary of Defense Policy Douglas J. Feith taking the lead for post-conflict reconstruction. 53

Leading up to the war in Iraq, General Franks (US Army, Retired) and Secretary Rumsfeld went back and forth on the evolution of the base plan. While General Franks (US Army, Retired) wanted force levels of 400,000 soldiers or higher, Secretary Rumsfeld wanted to change the paradigm and assume risk with a lighter, leaner, faster force of around 250 to 275,000 soldiers. General Franks (US Army, Retired) "was constantly grilled by Rumsfeld and Rumsfeld knew there was a line beyond which not to push; General Franks (US Army, Retired) described it as an "iterative process" while House Speaker Gingrich described it as "constant negotiation". 54

This constant negotiation between the civilian policy maker and military senior leadership provided an opportunity for adaptation at the strategic and operational level for the military planner. Samuel P. Huntington in *The Soldier and the State* argued political leadership should objectively control a professional military. ⁵⁵ However, the civilian military relationship is more complex and evolving than simple subordination of the military leader to the politician. Further, a diversity of critical thought and candid advice from senior military leadership is vital to

⁵² Gordon, *Cobra II*, 27.

⁵³ Woodward, *State of Denial*, 91.

⁵⁴ Gordon, *Cobra II*, 25.

⁵⁵ Samuel P Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations*, 5th ed. (Cambridge, MA: Belknap Press of Harvard University Press, 1957), 58.

United States policy decision makers. Subordination and rigidity stifles innovative solutions for complex problems.

While the policy aim of regime change in Iraq was agreed upon, variations and interaction of agents in the Bush administration resulted in incongruent strategy to achieve some measure of success for Iraq post conflict. As the tactical force tried to adapt to an increasingly difficult and destabilizing situation on the ground in Iraq, agents in the joint force and political leadership in the US also attempted to adapt. Zalmay M. Khalilzad, the National Security Council's senior director for the Gulf region and National Security Advisor Condeleezza Rice's subject matter expert, articulated the Administration's strategy, and thus the Department of Defense's strategy, as a transition to the Iraqi people as fast as possible. ⁵⁶

After the fast and successful thrust of the US joint force to Baghdad, there was a window of opportunity to stabilize the occupied country. It was missed. The negotiation for force levels continued between General Franks (US Army, Retired) and the Secretary of Defense Rumsfeld with Rumsfeld ultimately achieving his political aim: of an estimated 500,000 required to control Iraq post hostilities, 1st Cavalry Division was ordered not to deploy on 21 April 2003 leaving Central Command and Lieutenant General McKiernan as the Combined Joint Task Force-Iraq commander with less than half that number. ⁵⁷ General Franks (US Army, Retired) also ordered US forces to plan and assume as much risk in departing in the next sixty days as they did in their push to Baghdad. New coalition constabulary and US forces would arrive to stabilize the country,

⁵⁶ Woodward, State of Denial, 116.

⁵⁷Gordon, Cobra II, 461.

but not stay longer than 120 days.⁵⁸ General Franks (US Army, Retired) expected Jay Garner to arrive sixty days after combat operations had concluded; just as US forces were departing.⁵⁹

Leading the Office of Reconstruction and Humanitarian Assistance, Jay Garner wanted to get in to Iraq as soon as possible with the fall of the regime. His mental model was to get his team of advisers aligned with the Iraqi ministries to restore the government, security, and essential services to turn the governance and rule of law over to the Iraqi people and returning Iraqi diaspora as soon as practicable. National Security Adviser Condoleezza Rice noted, "The concept was that we would defeat the Army, but the institutions would hold, everything from ministries to police forces...You would be able to bring new leadership but we were going to keep the body in place." Washington, Central Command, and the Office of Reconstruction and Humanitarian Assistance all considered a quick transition of Iraq to the Iraqi people the desired strategy to achieve the policy aim of a diverse, free, democratically institutionalized and well-resourced Iraq.

While Jay Garner and his team struggled, the White House decided to restructure the US system and relationships and pursue new strategy to adapt policy to the interaction patterns in Iraq. Garner was marginalized. L. Paul "Jerry" Bremer III was hired as presidential envoy and established the Coalition Provisional Authority. ⁶¹ The assumption was that the Office of Reconstruction and Humanitarian assistance was subordinate to the Coalition Provisional Authority for the administration and reconstruction of post war Iraq. Bremer had been Henry Kissinger's Chief of Staff, served as ambassador to the Netherlands, and headed the State Department's office on counterterrorism; Rumsfeld considered it an advantage that he had no

⁵⁸ Ibid, 459.

⁵⁹ Ibid, 464.

⁶⁰ Gordon, Cobra II, 463.

⁶¹ Allawi, *The Occupation of Iraq*, 105.

experience in the Middle East.⁶² The US Government perception was he would pursue the White House's ambitious vision for the sculpting of Iraq without bias from preexisting middle-eastern relationships.⁶³

Bremer accepted the job as head of the Coalition Provisional Authority and sought to consolidate his political power.⁶⁴ He excluded Zalmay M. Khalilzad, the National Security Council's senior director for the Gulf Region from his team to unequivocally establish primacy as the leader in Iraq for the US government.⁶⁵ Because of his inexperience in the region and recognizing the deteriorating situation, Bremer instinctively sought to establish his authority and power in Iraq with the Department of Defense, the United States Government at large, and the various factions of the Iraqi leadership council, known as the "G-7".⁶⁶

Appointed on May 6, 2003, Bremer was on ground in Iraq six days later. By May 15 he cancelled a meeting to set-up an interim Iraqi government that previously committed to by Garner and Khalilzad.⁶⁷ On the 16th of May he issued his first order: "De-Ba'athification of Iraqi Society." This order excluded all members of the top four levels of the Ba'ath Party, around 30,000 people.⁶⁸ Bremer excluded the very thirty thousand people he could have resourced as a means to run the Iraqi government. Most members were not hard line Ba'athists, but belonged to

⁶² Gordon, Cobra II, 475.

⁶³ Allawi, *The Occupation of Iraq*, 107.

⁶⁴ Allawi, *The Occupation of Iraq*, 109.

⁶⁵ Woodward, *State of Denial*, 183. Dr. Khalilzad would eventually be the future Ambassador to Afghanistan 2003-2005, then Ambassador to Iraq 2005-2007, and the Ambassador to the United Nations 2007-2008 for the US.

⁶⁶ Allawi, *The Occupation of Iraq*, 109. The Iraq G-7 consisted of Talabani, Barzani, Chalabi and Ayad Allawi, Naseer al-Chadirchi, Ibrahim al-Jaafari, and el-Aziz al-Kakim.

⁶⁷ Gordon, Cobra II, 479.

⁶⁸ Allawi, The Occupation of Iraq, 150.

the party as a mechanism for existence in Iraq; it was a way to survive.⁶⁹ In the Sunni Arab community, "de-Ba'athification was shorthand for removing Sunni Arabs from positions of power and influence."⁷⁰

Iraqi Agents and Structure

Compounding the growing discontent among the Iraqi population, Bremer's second order disbanded the Iraqi Army and the Ministry of Information, about 400,000 people, on May 23rd. The Iraqi military and intelligence services disbanded and went home with their weapons. The ramifications of these orders agitated destabilizing feedback in the open system of Iraq. Iraqi political structures and disenfranchised agents self-organized in the post-Sadaam environment. The emergent property was not a peaceful democratic Arab society in the heart of the middle-east as envisioned by Washington, but conditions tending towards insurgency and civil war. The leadership transplant envisioned by Condoleezza Rice while leaving the body in place failed as evidenced by the violence that erupted from 2004 to 2006. The initial success of the invasion and opportunity to influence possible outcomes in Iraq beneficial to the United States and Iraq had been squandered as indicated by the rising violence.

⁶⁹ Ibid, 149.

⁷⁰ Ibid.

⁷¹ Allawi, *The Occupation of Iraq*, 154.

⁷² McChrystal, *Team Of Teams: New Rules Of Engagement For A Complex World*, pt. 5, – chap. 1, accessed December 29, 2015, iBooks. "By December (2004), there had been more major terrorist attacks in Iraq alone than there had been in the entire world in 2003. In 2005, terrorism in Iraq would claim 8,300 lives, the equivalent of almost three 9/11s in a country with one-tenth the population of the United States. Iraq, with less than one half of one percent of the global population, accounted for almost a third of all terrorist attacks worldwide and a majority of terrorism's fatalities in 2005. And it only got worse: the spring of 2006 saw more than a thousand Iraqis dying on Iraqi streets *each month*."

There was also significant misunderstanding of Iraqi culture, the structure of relationships within the country, and which agents carried influence; or sought more. When regime change occurred and foreign military forces were injected into the environment from the Iraqi perspective, the people of Iraq interacted with the American and coalition forces in unexpected ways. While the US policy makers and senior military leadership made assumptions on Iraq from their respective strategy perspectives, the operational and tactical forces of the US Army's V Corps, the Marine Expeditionary Force, and the Air Force were simultaneously interacting with the population in Iraq.

These interactions in Iraq after combat operations were diverse along multiple paths. In Anbar province in the west, Sunni agents and their emerging organizations were violent, and reconciliation efforts initially "foundered." Baghdad seemed to be lawless as looting flourished as a normative behavior and resentment towards US joint-forces festered. The empowered majority of Shi'a in the southern provinces were beginning to foment armed reprisals against the disempowered Sunni minority and carve secured enclaves for their political aspirations in a post Sadaam Iraq. Sadaam Iraq.

In the Iraqi network of relationships and structures, Iraq's population is composed of seventy-four tribes. ⁷⁶ Of those seventy-four tribes, the primary religious factions are Muslims of both the Shi'a and Sunni tradition with slivers of Christianity and other minority religions such as the Yazidis. ⁷⁷ The Ba'ath party was primarily Sunni in composition and generally suppressed the

⁷³ Mansoor, Surge: My Journey with General David Petraeus and the Remaking of the Iraq War, Foreword, accessed December 29, 2015, iBooks.

⁷⁴ McChrystal, *Team Of Teams: New Rules Of Engagement For A Complex World*, pt. 5, – chap. 1, accessed December 29, 2015, iBooks.

⁷⁵ Ibid, pt. 3, – chap. 12, accessed December 29, 2015, iBooks.

⁷⁶ Allawi, *The Occupation of Iraq*, xxvi.

⁷⁷ Ibid, 20.

majority Shi'a tribes before US military intervention. The ethnic Kurdish people occupy the north of Iraq and were also oppressed by the Ba'ath party in addition to being squeezed from their north by the ethnic Turkmen and state institution of the Turkish military. The Shi'a were primarily located in the south of Iraq with the city of An Najaf as the epicenter of their belief system followed closely by the shrine in Karbala. But the religious and tribal boundaries don't align neatly with the state boundaries commonly recognized by the international community.⁷⁸

The Kurdish population not only occupies the north of Iraq, but also the northern part of Syria and southern portions of Turkey. Similarly, the Shi'a people in Iraq do not only occupy the southern portions of Iraq. They have strong ties to the Shi'a majority to the east in Iran and towards Damascus, Syria to the west. Ayatollah Khomeini, the supreme religious leader of Iran and also a Shi'a, preached as a cleric in An Najaf, Iraq, from 1974-1978. The Shi'a community also extends into Syria towards Damascus to the West. Sandwiched in between in the center of power of was Baghdad, controlled by the minority Sunni and the Ba'ath party, surrounded by a Shi'a majority living in the city. Nowhere were there clear delineations or relationships between these people and their belief structures or their strategies to survive and prosper. The formal power structures of the Ba'ath party, and other power structures of culture, tribe, family, and religion constantly competed and interacted through dynamically shifting relationships to select successful strategies for adaptation.

These ethnic, cultural, and religious affiliations, connections, and proximities, created a complex demographic with multiple interests, agendas, competing strategies, and multiple layers of interaction and interdependence resistant to deliberate deconstruction. Ali A. Allawi, the first Defense Minister for Iraq, summarized the complexity and context into which the US interjected:

⁷⁸ Allawi, *The Occupation of Iraq*, 17.

⁷⁹ Ibid. 20.

When the Coalition arrived in Baghdad on 9 April, 2003, it found a fractured and brutalized society, presided over by a fearful, heavily armed minority. The post 9/11 *jihadi* culture that would subsequently plague Iraq was just beginning to take root. The institutions of the state were moribund; the state exhausted. The ideology that held the Ba'athist rule had decayed beyond repair. None of this was entirely unexpected, but it masked something more profound. These were the surface manifestations of Iraqi, particularly Iraqi Arab, society. But the real dangers – of divisiveness, vengefulness, deeply held grievances and bottled-up ethnic and sectarian passions – lurked underneath. 80

With the displacement of the Ba'ath Party and Saddam Hussein from power in Iraq, the joint force enabled the US to achieve its policy aim in 2003. But as quickly as major combat operations ended with deliberately planned and emerging military objectives attained, follow on objectives for transition to a new peaceful provisional Iraq government were obscured.

Iraq 2003-2006 Analysis

Iraq had significant agent and structural problems post-combat in 2003, overlaid by the discussed demographic of dense and complex relationships of Iraqi society. Potable water, electricity, food, government administration, police, and military security were all key concerns. The Office of Reconstruction and Humanitarian Assistance, the Coalition Provisional Authority, and the joint force on the ground were not resourced or prepared for stability operations after the initial attack. As Iraq dissolved as a nation into sectarian factions and violence due to the invasion of US forces and the purposeful destruction of the regime and its controlling instruments of power in the Ba'ath party and Iraqi military, the Iraqi government structure and society decomposed. Rather than slowing or stopping this decomposition by a properly resourced US military integrated into a broader strategy by the Coalition Provisional Authority, the rate of decomposition increased as evidenced by the levels of violence across the country from 2004-

⁸⁰ Allawi, *The Occupation of Iraq*, 17.

2006. Instability, unanticipated, increased in scope and pace, feeding the open system and ill-defined problems in Iraq towards broader and deeper instability; violence erupted.

From 2003 to 2006 Iraq quit functioning as a state and plummeted into an insurgency against the US forces in Iraq and a civil war among factions. Bremer's first and second orders disenfranchised close to 500,000 Iraqi government workers and soldiers directly. Bremer exemplies an agent in an organizational structure that selected a strategy in pursuit of adaptation. That selection manifested iterative and unanticipated destabilizing feedback in the complex system of Iraq. It affected the structure and interaction of interdependent agents and organizational structures across Iraq. The paths generated by a caustic mix of war, sectarian violence, criminal activity, terrorism, loss of political power and economic depression resulted in devastating effects to Iraq as a nation state and society.⁸¹

For example, the Ba'ath party administrators needed to run the Iraqi government were primarily Sunni Muslims, as were the military officers and non-commissioned officers; most junior enlisted soldiers were Shi'a Muslims from the south. 82 The Kurds protected their own people in the north. 83 Al Qaeda in Iraq (AQI) and international jihadists gravitated towards war with the growing coalition joint force. Unconventional warfare types from Iran provided weapons in the mix, as well. 84 Each of those factions confronted US and coalition forces. It proved to be a deadly mix and undermined the adaptation of the joint force towards US policy aims of a peaceful and prosperous Iraq. The US had selected a deliberate strategy in Iraq. But the

⁸¹ Allawi, The Occupation of Iraq, 131.

⁸² Ibid, 156.

⁸³ Ibid, 134 & 140.

⁸⁴ US Department of State. *Country Reports on Terrorism 2011*, accessed February 27, 2016, http://www.state.gov/j/ct/rls/crt/2011/195547.htm.

coevolutionary interaction between the joint force and factions in Iraq that recognized opportunity for emergent strategy destabilized the country.

Saddam's regime had long oppressed sectarian divides and violence. This created a stabilizing effect in Iraq. With the instruments of control removed by military intervention and nothing with an analogous effect emplaced to assume the function, Iraq spiraled into sectarian violence between the factions and the joint force. ⁸⁵ Disenfranchised Sunnis overtly waged an insurgency with Al Qaeda in Iraq against coalition forces and Shi'a. Long oppressed Shi'a during Sadaam's regime organized into militias in the south to protect themselves and conduct reprisal attacks against Sunnis. Al Qaeda in Iraq infiltrated sectarian factions that aligned with their interests and spread their influence. Kalashnikov rifles, rocket propelled grenades, and improvised explosive devices were abundant and deadly to coalition forces and especially to the Iraqi civilian population. ⁸⁶

The US attempted a deliberate strategy to support its policy aims of regime change and transition to a peaceful, prosperous, resourced, and secure Iraq. Interaction of policy and strategy as enforced on the ground in Iraq pushed self-amplifying feedback and instability into the open multilayered system of relationships between agents in Iraq and the United States. The US government was emulating the characteristics of a complex adaptive system trying to purposefully restructure its contributing agents and relationships to affect strategy and meet policy aims. But it did not adapt from 2003-2006 as those agents and structures implementing deliberate strategies interacted with the agents, emergent strategy, and structures in Iraq. The interaction patterns between agents and structures destabilized the open-system in Iraq. While the

⁸⁵ Freedman, Strategy: A History, 223-4.

⁸⁶ Kagan, *The Surge: A Military History*, chapter 1, accessed January 27, 2016, iBooks.

policy aim of regime change was met, transition to an Iraqi led, western style democracy was scrapped to stabilize a massive insurgency and civil war.

Section III. Historical Case Analysis: Operation Iraqi Freedom 2007-2008 "The Surge"

By 2006 Iraq had plummeted into sectarian violence and civil war.⁸⁷ The Sunni elite minority had been disenfranchised with the dissolution of the Ba'ath Party, Ministry of Information, and Iraqi Army. The previously oppressed majority of Shi'a were now unleashed as a population and emboldened by rhetorical if not material support from Iran and Syria.⁸⁸ Agents within those populations continued to inflame violence in the Iraq.

Iraqi Agents and Restructure

In the Sunni minority, the elite were fearful of their loss of power and for survival.

Combined with the unemployed and disenfranchised, an organic alignment between the Sunni and Al Qaeda in Iraq, catalyzed by the Jordanian Abu Musab al-Zarqawi, emerged. He wanted to drive the US joint force from Iraq by insurgency and conduct a civil war in Iraq against the majority Shi'a.⁸⁹

The Shi'a population also had their own agent that charged the volatility. While it seemed intuitive to the United States that the long oppressed Shi'a majority would benefit from the displacement of the Ba'ath Sunnis and align with the US joint force, Muqtada al-Sadr led the Shi'a against the US joint force. Additionally, the Shi'a had self-organized into militias. They had previously provided the actual soldiers for the Iraqi Army while the Sunni were senior NCOs

⁸⁷ Kagan, *The Surge: A Military*, part 1, – chap. 1, accessed January 27, 2016, iBooks; Mansoor, *Surge: My Journey with General David Petraeus and the Remaking of the Iraq War*, part 1, Foreword, accessed August 30, 2015, iBooks.

⁸⁸ US Department of State. *Country Reports on Terrorism 2011*, accessed February 27, 2016, http://www.state.gov/j/ct/rls/crt/2011/195547.htm.

⁸⁹ McChrystal, *Team Of Teams*, pt. 6, – chap. 1, accessed December 29, 2015, iBooks.

⁹⁰ Allawi, *The Occupation of Iraq*, 11.

and officers.⁹¹ They turned on the Sunni Ba'ath party and former officers, and the US joint force, conducting reprisal raids.⁹² On any given day at in 2006, the US joint force could be attacked by transnational agents from Al Qaeda in Iraq, Sunnis or Sunnis aligned with Al Qaeda in Iraq, and Shi'a militias equipped by Iran; or get caught up in conflict between any combination of those groups, sects, and tribally aligned agents interacting among the populace of Iraq.⁹³ Theorist Stathis Kalyvas describes this interaction pattern as the relation and disjunction between macrolevel reasons for war and the microlevel patterns of violence on the ground: "The game of record is not the game on the ground."⁹⁴ Interaction influences change.

This all contributed to a peak level of violence in 2006. ⁹⁵ By December 2006, three thousand Iraqis were dying every month. ⁹⁶ The relationships of agents and structures in Iraqi society evolved in tendencies over time and mutated daily based on survival and violence. In response, the joint force purposefully changed its leading agents, structure, and strategy to achieve the policy aim of stabilizing Iraq from 2006-2008. The effort attempted adaptation in Iraq even as Prime Minister Maliki of Iraq was nervous about an influx of troops to his hold on power. ⁹⁷

⁹¹ Cordesman, *The Iraq War: Strategy, Tactics, and Military Lessons*, 43; Allawi, *The Occupation of Iraq*, 156.

⁹² Allawi, *The Occupation of Iraq*, 145.

⁹³ Kagan, *The Surge: A Military*, – chap. 1, accessed January 27, 2016, iBooks.

⁹⁴ Stathis N Kalyvas et al., *The Logic of Violence in Civil War* (Cambridge: Cambridge University Press, 2006), 5.

⁹⁵ McChrystal, *Team Of Teams*, pt. 5, – chap. 1, accessed December 29, 2015, iBooks.

⁹⁶ Department of Defense, *Petraeus-Testimony-Slides20070910*, accessed February 28, 2016, http://www.defense.gov/pubs/pdfs/Petraeus-Testimony-Slides20070910.pdf.

 $^{^{97}}$ Robert M. Gates, $\it Duty: Memoirs of a Secretary at War$ (New York, USA: Knopf Publishing Group, 2014), 42

United States Agents and Restructure

The Department of Defense restructured its lead agents. "Immediately after the (November 2006) elections, President George W. Bush accepted Secretary of Defense Donald Rumsfeld's resignation and nominated former Central Intelligence Agency Director Robert Gates to replace him." Lieutenant General (US Army Retired) David H. Petraeus, fresh from commanding the Combined Arms Center at Fort Leavenworth, Kansas and formally publishing a new version of the Army's counterinsurgency field manual, was promoted and placed in charge of Iraq in January 2007 as the Multi National Force Iraq commander. 99 President George W. Bush changed the policy aim from rapid transition of Iraq to stabilization, the strategy to General Petraeus' counterinsurgency, added resources to the force structure, and revamped the leadership agency of the United States war in Iraq. 100

With a new leadership team and relationships restructured in the pursuit of adaptation in Iraq, the joint force approached influencing the situation in Iraq in a different way. It was not just an increase in forces. The core tenant of the new approach was the "most important terrain in the campaign in Iraq was the human terrain—the people—and (the) most important mission was to improve their security." Through control of terrain and protection of the populace with increased joint conventional forces, intelligence and special operations integration, restoration of essential services and economic opportunity, and Interagency activities, the approach used a

_

⁹⁸ Kagan, *The Surge: A Military History*, part 1, – chap. 2, accessed January 27, 2016, iBooks.

⁹⁹ Ibid, part 1, – chap. 2, accessed January 27, 2016, iBooks. The counterinsurgency field manual was US Army FM 3-24, Counterinsurgency, December 2006.

¹⁰⁰ President's Address to the Nation, Whitehouse Briefing room, January 10, 2007, accessed January 27, 2016, http://www.whitehouse.gov/news/releases/2007/01/20070110-7.html.

¹⁰¹ Mansoor, Surge: My Journey with General David Petraeus and the Remaking of the Iraq War, part 2, Foreword, accessed August 30, 2015, iBooks.

comprehensive civil-military approach to subdue sectarian violence and improve life. ¹⁰² The new strategy was known with a single narrative label publicly as "The Surge." ¹⁰³ A subset of "The Surge" was the Anaconda Strategy (Figure 1 below) which focused on Al-Qaeda in Iraq. It was representative of the comprehensive civil military approach used to address not only Al Qaeda in Iraq, but other groups contributing to the violence.

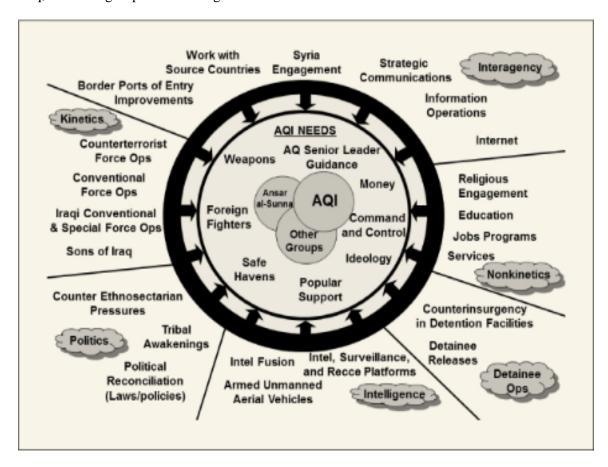


Figure 1. Anaconda Strategy versus Al Qaeda in Iraq.

Source: Multi-National Force Iraq, 9 April 2008.

¹⁰² Mansoor, Surge: My Journey with General David Petraeus and the Remaking of the Iraq War, part 3, Foreword, and Appendix 2 & 3, accessed August 30, 2015, iBooks.

¹⁰³ Ibid, part 2, Foreword, accessed August 30, 2015, iBooks.

Increased conventional forces living among the people protected and consolidated security gains among the populace while preventing friction between the factions. Violent agents, tightly guarded organizations, and loosely affiliated structures of Al Qaeda in Iraq, Sunni tribes, and Shi'a militias were relentlessly pursued by all means. Special operations task forces disrupted, degraded, and destroyed the network of Al Qaeda and offshoot organizations by not only targeting leadership, but mid-level participants where the densest set of structural relationships between members resided. Jordanian born Zarqawi, leader of Al Qaeda in Iraq, and partially responsible for influencing the Shi'a Sunni insurgency into a full-blown civil war, was killed on June 7, 2006. But the "main strategy was to hollow out the middle ranks of the organization, which tended to be the most connected." 105

This ongoing restructring of connections in Al Qaeda and other violent organizations complemented the Sunni Anbar Awakening in Ramadi, west of Baghdad. The Surge capitalized on the Awakening in the summer of 2006 and extended it into other areas of Iraq. ¹⁰⁶

"The initiative included empowering young men of the tribes who wanted to help secure their areas against al-Qaeda depredations. Ultimately, shortly after the surge of forces commenced and throughout 2007 and into 2008, this arrangement was replicated over and over in other areas of Anbar Province and Iraq. The Awakening proved to be a hugely important factor in combating al-Qaeda terrorists and other Sunni insurgents and, over time, in combating Shi'a militia in select areas as well." ¹⁰⁷

Shi'a and Sunni reprisals and raids declined and opportunities for cooperation in the restoration of infrastructure and government services appeared. Rule of law and governance was

¹⁰⁴ Joel Roberts, 'What's next after Zarqawi's Death?' (CBS News, June 8, 2006), accessed December 17, 2015, http://www.cbsnews.com/news/whats-next-after-zarqawis-death/.

¹⁰⁵ McChrystal, *Team Of Teams*, pt. 2, – chap. 12, accessed August 29, 2015, iBooks.

¹⁰⁶ Mansoor, Surge: My Journey with General David Petraeus and the Remaking of the Iraq War, Foreword, part 4, accessed December 29, 2015, iBooks.

¹⁰⁷ Ibid, Foreword, part 4, accessed August 30, 2015, iBooks.

eventually restored and by September 2007, levels of violence were reduced and trending towards stability. 108

Once the bundle of activities was identified that influenced violence to decrease, the traditional joint force organizational tendency towards efficiency and replication benefitted Iraq in this case. The Anbar Awakening provided an emergent strategy by the Sunni tribes to combine with the deliberate strategy of "The Surge." Individual agents in Al Qaeda in Iraq committed attrocities against Sunni and Shi'a tribes unwilling to participate in the insurgency. The tribes pushed back agains Al Qaeda in Iraq and interacted with surge operations and forces. This coevolutionary interaction and interdependence dampened the instability in Iraq and influenced it back towards a relative peace in macro by the end of 2008 (See Figure 2)

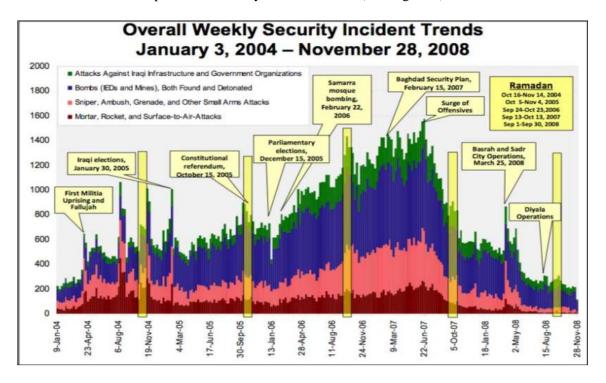


Figure 2. Overall Weekly Security Incident Trends in Iraq

Source: Department of Defense, 1 December 2008.

¹⁰⁸ David H Petraeus, Report to Congress on the Situation in Iraq, 2007.

Restructured relationships influenced Iraq towards stability. Political alignment of President Bush, Secretary Gates, and General (US Army, Retired) Petraeus made the political aim of stabilizing Iraq possible. The deliberate strategy of General (US Army, Retired) Petraeus' counterinsurgency doctrine operations, activities, and actions affected individuals and networked organizations at the national level in Iraq. The agents within the US government had selected and resourced a new structure and strategy due to internal and external pressures and influenced adaptation in Iraq back towards stability. It was fragile, but a measure of success was achieved.

Iraq required the complexity of the joint force to match the complexity of the environment at all scales in order to increase the possibility of influencing future events. ¹⁰⁹ The surge's civil-military approach from 2006 to 2008 addressed the scale of interactions from individual agents to structured organizations in Iraq. Kurd, Sunni, Shi'a, foreign fighters, Al-Qaeda, and permutations of each group were influenced across scales of interaction and interdependence from individual to organization. Conventional forces secured the Iraqi people in major population centers. Violent extremist organizations such as Al Qaeda in Iraq and other organizations such as Shi'a and Sunni militas were targeted with a a variety of lethal and non-lethal effects to quell levels of violence. Violent and violence facilitating individuals and their relationship structure of influencing connections were reduced, changed, or eliminated at a scope and pace the insurgency was unable to match. Desired connections and structures such as the Anbar Awakening cooperatively emerged as undesired interaction patterns were being reduced.

Politically, the US joint force influenced the Iraqi structure and agents as well:

Expanding beyond their traditional mission, the U.S. military had an active role in getting key legislation passed in the Iraqi parliament...General Petraeus acted on his conviction

¹⁰⁹ Yaneer Bar-Yam, *Making Things Work: Solving Complex Problems in a Complex World* (Cambridge, Mass.: Knowledge Press: NECSI, Knowledge Press, 2005), 67.

that political progress was essential to benefit from the military gains. He knew that the window of opportunity opened by the military would not remain open for long, and he used all the resources available to push the government and Prime Minister Maliki through before it closed. At Petraeus's direction, military leaders at all levels engaged in a campaign to get votes in the Iraqi parliament for the reconciliation legislation. 110

More desired connections and interactions by the joint force increased opportunity for selection of new strategy and adaptation among agents. By restructuring connections and relationships in shape, quality, numbers, and at a pace which with the insurgency could not connect or reconnect, the joint force impeded the insurgency's capability to adapt. Further, the Interagency targeted the insurgency and violent extremist organizations financial resources using money as a weapon system, and started to restore essential services and foster economic development.¹¹¹

Additionally, reconciliation was another interaction opportunity. Factions that could be reconciled to battle Al Qaeda in Iraq were reconciled. "The role of U.S. commanders and troops in 'setting the conditions' that allowed this turnaround to occur should not be underestimated; they took immense risk and suffered casualties in intervening in sectarian fighting and resourcing and supporting the Iraqi sheikhs and tribal leaders who turned against Al Qaeda." ¹¹² Gradually the Sunni aligned with Al Qaeda in Iraq were persuaded, attracted, or coerced from their alignment and started to take responsibility for security in their population areas. ¹¹³ This reduced Al Qaeda in Iraq's support base and operational capability which influenced Iraq towards stability and less violence. The joint force adapted by matching the complexity of the

¹¹⁰ William A. Knowlton, Jr., *The Surge, General Petraeus, and the Turnaround in Iraq* (Industrial College of the Armed Forces: National Defense University, 2013), 28, accessed January 17, 2016, http://www.dtic.mil/dtic/tr/fulltext/u2/a577539.pdf.

¹¹¹ Mansoor, Surge: My Journey with General David Petraeus and the Remaking of the Iraq War, Appendix 2, accessed August 30, 2015, iBooks.

¹¹² Linda Robinson, *Tell Me How This Ends: General David Petraeus and the Search for a Way Out of Iraq* (New York:PublicAffairs, 2008), 324-325.

¹¹³ Joseph Nye, *The Future of Power*, 1st ed. (New York: PublicAffairs, U.S., 2011), 14.

environment in Iraq at all scales with its own complex behavior of agents and structure, the surge. This adaptation decreased violence and achieved the opportunity, the policy aim of stabilization, by 2008.

Section IV. Conclusion

Operation Iraqi Freedom was analyzed from 2003-2006 and 2006 to 2008 with the concepts of agents and structure towards the criterion of adaptation from a complex adaptive system perspective. Drawing chronological boundaries for analysis is useful for simplification, but can't justly capture in totality the interconnectedness and temporal distance of history, events, agents, strategies, and the dynamism of change in a complex environment. Events that transpired long before 2003 and after 2008 may also influence events yet to occur in the future. It may be almost impossible to discern a connection. However, this analysis enables a step towards insight of what questions to ask that create connections and opportunities for adaptation in a complex environment.

Selecting agents and structure as variables for the criterion of adaptation is much like drawing a map. One must consider how to connect reality through representation. Analysis of 2003-2006 demonstrated a lack of adaptation from the US perspective. From 2006-2008, policy aims and strategic goals were met demonstrating adaptation. Over a five-year slice of Iraq, oscillations between stability and instability amplified and retarded violence that cost lives and resources, physical and emotional wounds, state and cultural fracture.

Coalition and joint Airman, Soldiers, Marines, Sailors, Coastguardsman, counterparts in the Interagency, and policymakers all had interests and fought their own versions of the Iraq war. They adapted constantly to do the best with what mission they were assigned and resources allocated. Further, analyzing Iraq from 2003 to 2008 from a systems perspective does not callously discount the human pain and suffering that transpired. The intent was to prevent it in the future when military force is being considered as a viable option for the policy maker.

¹¹⁴ John Lewis Gaddis, *The Landscape of History: How Historians Map the Past* (New York: Oxford University Press, USA, 2002), 45.

The opportunity for improving adaptation for the joint force resides in the further examination at the strategic level in the conversation and dialog, the negotiation between policymaker and senior military officer. In a hierarchal structure such as the US government, distributed risk in war at the tactical and operational level is condensed in relationships and conversation at the upper levels of the US government between the agents-policy maker and the military advisor. General (US Army, Retired.) Petraeus had almost daily iterative conversations with the Secretary of Defense and President. An important opportunity for selecting a strategy to achieve some measure of success, adaptation of the policy aim, was in those conversations.

If we accept the premise that the complexity of an organization has to match the complexity of the environment to succeed, then in a pure hierarchal structured organizations, the level of complexity that organization can purposefully create resides with the lone figure at the top of the hierarchy. That organization's ability to adapt is constrained. Two examples of rigid hierarchal structures that limited conversation and ideas with a restrictive agent at the top were the Department of Defense and the Coalition Provisional Authority.

Secretary Rumsfeld constantly marginalized State, the National Security Council, and the Joint Chiefs of Staff to sustain his strategy of transformation as Secretary of Defense. His publicly valued qualities of determination, perseverance, and aggression—his Princeton Wrestler's persona— actually restructured the US government decision-making relationships between agents towards a lesser capacity for complexity at scale. While his individualized behavior was complex, the organizational behavior of the US government in Iraq was simplified by it. His behaviors prevented open discussion for innovative deliberate and strategy, and the freedom to recognize and seize emergent strategy. The polarized and divisive conversations

¹¹⁵ Yaneer Bar-Yam, *Making Things Work: Solving Complex Problems in a Complex World* (Cambridge, MA: Knowledge Press: NECSI, Knowledge Press, 2005), 67.

between the Secretary, Joint Chiefs, and Central Command commander, cost the US government, service components, and the Iraqi people across all ethnicities, cultures, and religions.

Downstream from the decisions in Washington DC, Bremer emulated the same behavior. To establish his authority at the top of the hierarchy in Iraq, he disenfranchised 500,000 people and turned a strategic resource of Iraq, its human capital, into sectarian factions of capable and motivated contestants to the desired future. His selection of strategy, fully rationalized in his

hierarchal perception, had disastrous consequences when injected into Iraq.

In contrast, as the Ba'ath party, Ministry of Information, and Iraqi military dissolved, the remnants reformed outside the state hierarchal structure. Relationships between tribes, religions, ethnicities, transnational actors, Al Qaeda in Iraq, criminal networks, covert and overt, congealed and self-organized along new agents, structures and strategies, all searching for a measure of success in the instability of Iraq. The network's complex individual behaviors in micro were gaining power at the macro level and attempting to expel the United States. The decentralized structure and relationships allowed the components to diffuse and mass as needed for their purpose and perceived level of security, availing them a multitude of strategies for selection. From 2003-2006 the joint force was locked in to a hierarchal structure and agent strategy with little evolution or variation while the Iraq insurgency adapted daily with facility and violence.

In the words of General (US Army, Retired) McChrystal, that environment "...requires both the visible hand of management and the invisible hand of emergence, the former weaving the elements together and the latter guiding their work. (Adaptable forces) are designed to foster emergent intelligence that can thrive in the absence of a plan." The US government and joint force had to restructure their leading agents, their relationships and roles, their strategy, in pursuit of adaptation in this complex environment.

¹¹⁶ McChrystal, *Team Of Teams*, pt. 8, – chap. 2, accessed August 29, 2015, iBooks.

The joint force changed its agents and structure that invigorated a deliberate and emergent strategy to achieve a measure of success in Iraq from 2006-2008. The Department of Defense was restructured with a new Secretary of Defense, Robert Gates and placed General (US Army, Retired) Petraeus in charge of the counterinsurgency. From 2006-2008, the joint force and Interagency re-stabilized Iraq and dampened the instability. Active pursuit of the insurgency through intelligence and special operations, control of terrain and protection of the populace with increased conventional forces, restoration of essential services and economic opportunity, financial targeting, and other operations quelled the violence, stabilized the nation, and provided an opportunity for a functioning government to emerge in 2008.

The US government, and in particular the joint force agents, had changed from a restricting hierarchy to a structure of hierarchy with a dense set of formal and informal relationships and connections that exchanged ideas. The organization was able to select complex behavior individually and spread that selection across the organization. Consequently, the complexity of the joint force in the structuring of its agents was able to match the complexity of the environment in Iraq and adapt.

While the US government policy aim in 2003 shifted from regime change and a search for WMD to transformation of Iraq, and then to a counterinsurgency, the seemingly disconnected elements of Iraqi society were self-organizing and interacting to events more quickly, more organically, with an increased capacity for adaptability. Agents in the US government were not structurally organized or encouraged to adapt until 2006. It's easy to say "The Surge" worked because mass controlled the situation on the ground in Iraq. This overstated the importance of numbers as opposed to a new strategy implemented by General (US Army, Retired) Petraeus. 117

The number of agents and how they related and connected ideas, their structure, was increased

¹¹⁷ Freedman, Strategy: A History, 224.

and reformed across all levels of effort and scale. Conversely, agents and the interaction structure of the insurgency were disconnected and reduced.

The number of agents and the density of connections between those agents contribute to their sharing of ideas and opportunities for behavorial adaptability. The dialog between the senior military officer and the policy maker must consider how to restructure the relationships of connected agents through civil-military action to meet the policy aim. There are military and Interagency options for increasing or decreasing the density of connections; shaping the structure and complex behavior of the agents. The interaction and interdependence of agents can intentionally influence deliberate and emergent strategy that achieves some measure of success; that achieves adaptation.

The requirement to adapt in complex environments is almost *a priori*. As the joint force moves towards the future, it needs to understand adaptative characteristics in structure and agency for the force to meet national security interests and policy aims. Understanding how to purposefully and rapidly restructure agent relationships within the US government and the adversary's organization increases the possibility of US policy aims achieving some measure of success.

Bibliography

Primary Sources

- Department of Defense. *Petraeus-Testimony-Slides20070910*. Accessed February 28, 2016. http://www.Defense.Gov/Pubs/Pdfs/Petraeus-Testimony-Slides20070910.Pdf.
- Gates, Robert Michael. *Duty: Memoirs Of A Secretary At War*. New York, USA: Knopf Publishing Group, 2014.
- Mansoor, Peter R. Surge: My Journey With General David Petraeus And The Remaking Of The Iraq War (Foreword by General Petraeus). United States: Yale University Press, 2014.
- President of The United States. *The National Security Strategy of The United States Of America*. 2002. Washington DC: National Security Council, 2002.
- President of The United States. *National Security Strategy*. Washington DC: National Security Council, 2015.
- President of The United States. "Presidential Address on the Iraq War." January 10, 2007. Accessed January 27, 2016. http://www.whitehouse.gov/news/releases/2007/01/20070110-7.html.
- Rumsfeld, Donald. "Beyond Nation Building." Secretary of Defense address, 11th Annual Salute to Freedom of the Intrepid Sea-Air-Space Museum, New York, Friday, February 14, 2003.
- US Army Training And Doctrine Command. *FM 3-24 Counterinsurgency*. Fort Monroe, VA: US Army Training And Doctrine Command, 2006. Accessed March 17, 2016. http://usacac.army.mil/cac2/repository/materials/coin-fm3-24.pdf.
- US Army Training And Doctrine Command. *Operational Concepts For The Airland Battle And Corps Operations -1986*. Fort Monroe, VA: US Army Training And Doctrine Command, 1981.
- US Congress. House. *Iraq: the Crocker-Petraeus Report to the House Committee on Foreign Affairs.* 110th Congress, 1st Session, September 10, 2007.
- US Department of State. *Country Reports On Terrorism 2011*. Accessed February 27, 2016. http://www.state.gov/j/ct/rls/crt/2011/195547.htm.

Secondary Sources

- Allawi, Ali A.. *The Occupation Of Iraq: Winning The War, Losing The Peace*. 1st Ed. New Haven, CT: Yale University Press, 2007.
- Axelrod, Robert And Michael D. Cohen. *Harnessing Complexity: Organizational Implications Of A Scientific Frontier*. New York: Basic Books, 2001.
- Bar-Yam, Yaneer. *Making Things Work: Solving Complex Problems In A Complex World*. Cambridge, MA: Knowledge Press: NECSI, Knowledge Press, 2005.

- Bousquet, Antoine And Simon Curtis. "Beyond Models And Metaphors: Complexity Theory, Systems Thinking And International Relations." *Cambridge Review Of International Affairs* 24, No. 1 (March 2011): 43–62.
- Brown, Chris And Kirsten Ainley. *Understanding International Relations*. 4th Ed.. Basingstoke: Palgrave Macmillan, 2009.
- Clausewitz, Carl Von. *On War*. Edited By Michael Howard and Peter Paret. United States: Princeton University Press, 1984.
- Cordesman, Anthony H.. *The Iraq War: Strategy, Tactics, And Military Lessons*. 1st Ed.. United States: Praeger Published In Cooperation With Center For Strategic And International Studies, 2003.
- Darwin, Charles and Julian Huxley. *The Origin Of The Species By Means Of Natural Selection Of The Preservation Of Favoured Races In The Struggle For Life*. New York: Signet Classic, 2003.
- Defense Strategy Review. "The Statistical Irrelevance Of American SIGACT Data: Iraq Surge Analysis Reveals Reality." Categories. November 9, 2015. Accessed March 17, 2016. http://www.comw.org/wordpress/dsr/the-statistical-irrelevance-of-american-sigact-data-iraq-surge-analysis-reveals-reality.
- Fontenot, Gregory, E J Degen, and David Tohn. *On Point: The United States Army In Operation Iraqi Freedom (Through May 2003)*. United States: Combat Studies Institute Press, 2004.
- Freedman, Sir Lawrence. Strategy: A History. Oxford: Oxford University Press, 2013.
- Gaddis, John Lewis. *The Landscape Of History: How Historians Map The Past*. New York: Oxford University Press, USA, 2002.
- Gharajedaghi, Jamshid. Systems Thinking: Managing Chaos And Complexity A Platform For Designing Business Architecture. 2nd Ed.. Boston, MA: Butterworth-Heinemann, 2005.
- Gordon, Michael R And Bernard E Trainor. *Cobra II: The Inside Story Of The Invasion And Occupation Of Iraq.* New York, NY: Pantheon Books, 2006.
- Harrison, Neil E., Ed. Complexity In World Politics: Concepts And Methods Of A New Paradigm (Suny Series In Global Politics). Albany: State University Of New York Press, 2006.
- Hatch, Mary Jo. Organization Theory: Modern, Symbolic And Postmodern Perspectives. New York: Oxford University Press, 1997.
- Hendawi, Hamza Hendawi. "ISIS Top Brass Is Iraqi Army's Former Best And Brightest." *Haaretz*. August 8, 2015. Accessed December 17, 2015. http://www.haaretz.com/israelnews/1.670177.
- Holt, Victoria K. And Michael G. Mackinnon. "The Origins And Evolution Of US Policy Towards Peace Operations." *International Peacekeeping* 15, No. 1 (February 2008): 18–34. 10.1080/13533310701879860.

- Huntington, Samuel P. *The Soldier And The State: The Theory And Politics Of Civil-Military Relations*. 5th Ed. Cambridge, MA: Belknap Press Of Harvard University Press, 1957.
- Isserson, G.S. "The Evolution Of Operational Art." *SAMS Theoretical Special Edition* (2005): 38–65 And 114–122.
- Jervis, Robert. *System Effects: Complexity In Political And Social Life*. 3rd Ed.. United States: Princeton University Press, 1997.
- Jervis, Robert. "Thinking Systemically About Geopolitics." *Geopolitics* 15, No. 1 (January 29, 2010): 165–171.
- Joint Chiefs Of Staff. *Department Of Defense Dictionary of Military And Associated Terms*. Washington DC: Department of Defense, 2015.
- Joint Chiefs Of Staff. Joint Publication 5-0. Washington DC: Department Of Defense, 2011.
- Joint Chiefs Of Staff. Joint Publication 3-0. Washington DC: Department Of Defense, 2011.
- Kagan, Kimberly. The Surge: A Military History. United States: Encounter Books, 2010.
- Kalyvas, Stathis N, Peter Lange, Robert H. Bates, Ellen Comisso, And Peter Hall. *The Logic Of Violence In Civil War*. Cambridge: Cambridge University Press, 2006.
- Kluger, Jeffrey. Simplexity: Why Simple Things Become Complex (And How Complex Things Can Be Made Simple). New York: Hyperion E-Books, 2008.
- Knowlton, Jr., William A. *The Surge General Petraeus And The Turnaround In Iraq*. Industrial College Of The Armed Forces: National Defense University, 2013. Accessed January 17, 2016. http://www.dtic.mil/dtic/tr/fulltext/u2/a577539.pdf.
- Lamborn, Alan C. "Theory and Politics in World Politics." *International Studies Quarterly* 41, no. 2 (June 1997): 187–214.
- Mcchrystal, Stanley A., David Silverman, And Tantum Collins. Team Of Teams: New Rules Of Engagement For A Complex World. United Kingdom: Penguin Books, 2015. Accessed August 29, 2015. Ibooks.
- Nye, Joseph S. *The Future Of Power*. 1st Ed. New York: Public Affairs, 2011.
- Parsa, Misagh. States, Ideologies, And Social Revolutions: A Comparative Analysis Of Iran, Nicaragua, And The Philippines. Cambridge, England: Cambridge University Press, 2000.
- Roberts, Joel. "What's Next After Zarqawi's Death?" June 8, 2006. Accessed December 17, 2015. http://www.cbsnews.com/news/whats-next-after-zarqawis-death/.
- Robinson, Linda. *Tell Me How This Ends: General David Petraeus and the Search for a Way Out of Iraq.* New York: PublicAffairs, 2008.
- Simpson, Emile. War From The Ground Up: Twenty-First Century Combat As Politics.

- Australia: Scribe Publications, 2013.
- Sly, Liz. "The Hidden Hand Behind The Islamic State Militants? Saddam Hussein's." *Washington Post*. April 4, 2015. Accessed December 17, 2015. https://w.ww.washingtonpost.com/world/middle_east/the-hidden-hand-behind-the-islamic-state-militants-saddam-husseins/2015/04/04/aa97676c-cc32-11e4-8730-4f473416e759_story.html.
- Smith, Adam, Robert L Heilbroner, And Laurence J Malone. *The Essential Adam Smith*. Oxford: Oxford University Press, 1987.
- Strachan, Hew. *The Direction Of War: Contemporary Strategy In Historical Perspective*. Cambridge: Cambridge University Press, 2013.
- Strassler, Robert B. The Landmark Thucydides. United States: Simon & Schuster, 1998.
- Tse-Tung, Mao. "Selected Works Of Mao Tse-Tung." Marxist.Org. Accessed August 15, 2015. https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1_12.htm.
- Wawro, Geoffrey. *The Franco-Prussian War: The German Conquest Of France In 1870-1871*. United Kingdom: Cambridge University Press, 2005.
- Woodward, Bob. State Of Denial: Bush At War, Part III. 1st Ed. New York: Simon & Schuster, 2006.
- Wright, Dr. Donald. *On Point II: Transition To The New Campaign*. Edited By Timothy Reese. Fort Leavenworth: Combat Studies Institute Press, 2008.
- Wyke, Tom. "Over 100 Former Saddam Hussein-Era Officers Make Up ISIS Leadership." *Daily Mail*. August 8, 2015. Accessed December 17, 2015. http://www.dailymail.co.uk/news/article-3190314/the-secret-isis-s-success-100-former-saddam-hussein-era-officers-run-jihadi-group-s-military-intelligence-operations-iraq-syria.html.